Before the Federal Communications Commission Washington, D.C. 20554

In the Matter of

Commission Requirements for Cost Support Material To Be Filed with Open Network Architecture Access Tariffs

ORDER

Adopted: December 20, 1991; Released: December 23, 1991

By the Deputy Chief (Policy), Common Carrier Bureau:

I. INTRODUCTION

1. This Order considers several petitions for waiver of the TRP Order¹ filed by the Bell Operating Companies (BOCs).2 The TRP Order describes specific data formats for basic cost, demand, and rate information to be submitted by BOCs filing tariffs that implement their Open Network Architecture (ONA) plans, including the direct costs associated with each Basic Service Element (BSE). To develop BSE direct costs, BOCs begin with the Switching Cost Information System (SCIS), developed and maintained by Bell Communications Research, Inc. (Bellcore), and other, similar computer models.4 These computer models apportion joint and common switching investment between individual BSEs. In their petitions for waiver the BOCs ask us to waive the requirement that the BOCs file the SCIS model and certain other data. The BOCs contend that the SCIS model, containing switch vendor data, as well as inputs to the model supplied by the BOCs, and output reports generated by SCIS cost studies, all constitute proprietary materials that should be withheld from public disclosure.⁵

2. After conducting an in camera review of SCIS and its application in the context of Ameritech's ONA rate development for Illinois, and examining the summaries of methods used by state regulatory authorities to implement protected disclosure of SCIS, we have determined that the full SCIS model and supporting documentation, as well as associated BOC materials and vendor data, should not be available for public inspection. The model and supporting documentation would be exempt from mandatory disclosure under the FOIA, both because the model and documentation contain competitively sensitive materials and because disclosure of these materials would compromise agency programs.⁶ Such considerations would not, of course, justify failing to provide these materials for inspection by Commission staff. We accordingly require each of the BOCs to submit its SCIS model for one study area and its complete SCIS inputs and outputs for all study areas, together with proprietary post-SCIS rate development elements and procedures, for in camera review by the Commission. As a result of our action in this Order, the full SCIS model and supporting documentation will not be available for public inspection. We will determine questions relating to restricted access by active participants in this Commission proceeding in a subsequent order.

II. BACKGROUND

3. The Part 69 ONA Order authorizes local exchange carriers to use a flexible, cost-based approach for pricing new, and newly unbundled, ONA services. Using this standard, the Commission requires price cap carriers to support new service offerings with cost support that: (1) satisfies the net revenue test; (2) identifies the direct costs of the new service; (3) includes an appropriate level of overhead costs; and (4) provides ratios of direct unit cost to unit investment, and direct unit cost to unit price. These materials, especially (2) and (4), enable the Com-

¹ Commission Requirements for Cost Support Material To Be Filed with Open Network Architecture Access Tariffs, Order, DA 91-1168, released Sept. 19, 1991 (Com.Car.Bur.) (TRP Order).

Cost Information System (CCSCIS), for the development of direct costs for the Remote Activation of Message Waiting -- Expanded element. Hereafter, we use the term SCIS to refer to these and any other corresponding computer models used by BOCs to develop direct BSE costs for ONA implementation.

Requests for waiver of the TRP Order requirements in several respects not involving issues of SCIS disclosure were resolved in two earlier Orders. Commission Requirements for Cost Support Material To Be Filed with Open Network Architecture Access Tariffs, Order, DA 91-1309, released Oct. 18, 1991 (Com.Car.Bur.) (Ameritech TRP Waiver Order), Erratum, DA 91-1345, released Oct. 28, 1991; Commission Requirements for Cost Support Material To Be Filed with Open Network Architecture Access Tariffs, Order, DA 91-1346, released Oct. 29, 1991 (Com.Car.Bur.) (Non-SCIS TRP Waiver Order). The Ameritech TRP Waiver Order resolved Ameritech's waiver requests not involving SCIS issues. The Non-SCIS TRP Waiver Order resolved non-SCIS waiver requests of the other six BOCs. See Critical Mass Energy Project v. NRC, 830 F.2d 278 (D.C. Cir. 1987) (Critical Mass I).

der).

The Bell Operating Companies are the operating companies of Ameritech Operating Companies (Ameritech), Bell Atlantic Telephone Companies (Bell Atlantic), BellSouth Telephone Companies (BellSouth), New York Telephone Company and New England Telephone and Telegraph Company (NYNEX), Pacific Bell and Nevada Bell (Pacific), Southwestern Bell Telephone Company (Southwestern), and US West Communications, Inc. (US West).

The Commission specified the rate elements and corresponding cost support demonstration required to implement the BOCs' ONA plans in the *Part 69 ONA Order*. Amendments of Part 69 of the Commission's Rules Relating to the Creation of Access Charge Subelements for Open Network Architecture, CC Docket No. 89-79, Report and Order, Order on Reconsideration, and Supplemental Notice of Proposed Rulemaking, 6 FCC Rcd 4524 (1991) (*Part 69 ONA Order*).

⁴ US West does not rely on SCIS for the development of BSE direct costs, but instead uses its own equivalent model, the Service Cost Model (SCM). Ameritech, in addition to SCIS, relies on a similar cost model, Common Channel Switching

Ameritech has already complied with this requirement.

⁸ Part 69 ONA Order, 6 FCC Rcd at 4531.

mission to evaluate the reasonableness of resulting rates.⁹ For the initial ONA tariff filings the BOCs must furnish cost information supporting their basic service elements (BSEs) as new services.¹⁰

- 4. The *Part 69 ONA Order* implemented an approach to pricing new services that accords BOCs reasonable flexibility to price efficiently and maintains the price cap incentives to innovate. At the same time, however, the Commission expressed concern that the local exchange carriers not set excessively high, predatorily low, or unreasonably discriminatory rates. Accordingly, the *TRP Order* further specified the cost support material to be supplied in conjunction with ONA tariffs. The "cost support requirements included any engineering or cost accounting studies, such as SCIS, used in the development of BSE rates. Cost support materials filed with tariffs are routinely available for public inspection. The *TRP Order* explained that to assess the reasonableness of the ONA rates, the Bureau and the intervenors need complete documentation of these studies.
- 5. The BOCs use SCIS to attribute investment to individual services provided by switching equipment that uses shared equipment to provide many services. The SCIS model itself consists of algorithms developed and maintained by Bellcore, but its operation necessarily entails reliance on input data supplied by the BOCs and switch vendors. And One series of SCIS outputs constitute investment figures oriented to the eventual replacement cost of the switch, which are then further adjusted to generate the BOC's direct costs used as an element in the BSE rate development process. Bellcore licenses the SCIS model to BOCs and some non-BOC exchange carriers.
- 6. The *TRP Order* provided that carriers unable to furnish the data required by that Order could file applications for waiver, demonstrating good cause for furnishing a different or lower level of cost support detail and indicating how these deficiencies would be rectified. On September 27, 1991, the BOCs filed petitions for waiver of several aspects of the *TRP Order*, including requests by

all BOCs for waiver of the filing requirements for SCIS.¹⁷ Several BOCs attached illustrative nondisclosure agreements, employed to enable review of SCIS in state ratemaking proceedings, to their petitions for waiver. On October 4, 1991, American Telephone and Telegraph Company (AT&T), Ericsson Network Systems Inc. (Ericsson), MCI Telecommunications Corporation (MCI), and Northern Telecom Inc. (Northern Telecom) filed comments regarding the BOCs' waiver petitions.

- 7. After reviewing these pleadings, the Bureau on October 18, 1991, released an Order addressing issues raised in Ameritech's TRP waiver petition. The Ameritech TRP Waiver Order accorded Ameritech's SCIS materials provisional protection against disclosure for purposes of conducting an in camera review, but deferred any final decision concerning the SCIS filing requirement and waiver requests until after that in camera review. Ameritech filed on October 25, 1991, 18 a copy of its SCIS model for the state of Illinois as well as supporting documents. 19
- 8. The Tariff Division subsequently requested that each BOC file supplemental materials describing the extent and method of SCIS disclosure in state proceedings, and the BOCs filed this information on November 13, 1991. These supplemental materials show that BOCs have not provided what they consider proprietary SCIS information to state regulators absent a protective order or nondisclosure agreement.²⁰
- 9. State public utility commissions requested and received a variety of SCIS information. Some state commissions had access to the SCIS model and full documentation. In addition, in one state proceeding an apparently extensive, independent audit was conducted of the internal validity of Pacific's SCIS model; because the audit was conducted under a rigorous protective order and nondisclosure agreements, however, the regulatory authority's public report of the audit to the California state legislature was essentially devoid of descriptive

In addition, the Order permits a carrier to include "risk premiums" the carrier believes it needs to supplement its rate of return for risky new services. *Id.* at 4531.

¹⁰ Because BSEs unbundled from feature group arrangements will be offered as alternatives to those arrangements during a transition period, such BSEs constitute new offerings under price cap criteria. *Id.* at 4529, para. 25. In addition, BOCs must show revenue neutrality for the BSEs and BSAs unbundled from feature groups. *Id.* at 4532.

¹¹ *Id.* at 4531.

^{12 47} C.F.R. §§ 0.451(a), 0.455(b)(11).

¹³ TRP Order at para. 3.

Technical information provided Bellcore by switch vendors includes: long range product development plans and delivery schedules; detailed technical descriptions of switch architecture; hardware engineering rules and capacities; unit level prices of individual switching components; discount schedules; service descriptions (how the switch implements a particular service); and resource consumptions on a per feature or per function basis, as required. See NYNEX Transmittal 57, Description and Justification (D&J) Appendix B at 5.

¹⁵ See also Bellcore Memorandum, Affidavit of James Britt. Several of the BOCs attach to their waiver petitions a memorandum from Bellcore discussing the proprietary nature of SCIS. They also attach an affidavit from the Bellcore employee

responsible for maintaining SCIS. See Bell Atlantic, NYNEX, and Pacific Petitions.

¹⁶ TRP Order at para. 24.

¹⁷ Southwestern and US West filed contingency petitions for waiver. These carriers expressed an intent to file applications for review of the SCIS filing requirement. Southwestern did not file a petition for reconsideration. US West filed an application for review and petition for stay on October 4, 1991. In light of previous actions taken by the Bureau, and described at para. 7, US West's petition for stay is moot. Petitions for Reconsideration filed by AT&T and Northern Telecom are pending.

The Ameritech TRP Order at para. 20 required Ameritech to file its SCIS model within 72 hours of the Order's October 18, 1991 release. On October 23, 1991 Ameritech filed a motion for extension of time requesting an extension of the filing requirement to and including October 25, 1991. The Bureau granted Ameritech's motion. Order, DA 91-1328, released Oct. 24, 1991.

¹⁹ In a November 26, 1991, letter the Chief, Tariff Division, requested full SCIS information for other Ameritech study areas for a similar *in camera* review. Ameritech filed this information on December 9, 1991.

The Florida Public Utilities Commission has not yet ruled on a BellSouth motion of confidentiality in one of its proceedings.

²¹ See November 13 Reports of Ameritech, Pacific, Southwestern, and US West.

detail.²² Other state commissions saw only redacted versions of the model, stripped of the specific carrier or vendor data necessary to track the rate development process; portions of the documentation; or some type of summary overview of the model.²³

III. PLEADINGS

- 10. Petitioners suggest several grounds for precluding public inspection of the SCIS model and other documentation. First, argue the BOCs, SCIS constitutes a valuable trade secret which is proprietary to Bellcore. Bell Atlantic Petition at 2; BellSouth Petition at 4; NYNEX Petition at 2-3; Pacific Petition at 4; see also US West Petition at 3. Second, some BOCs assert that when using SCIS, the carrier inputs its own proprietary and confidential information, including negotiated pricing arrangements between itself and equipment vendors as well as sensitive demand information. BellSouth Petition at 5: NYNEX Petition at 4: see also Southwestern Petition at 2-3. In addition, the BOCs contend that the SCIS model contains engineering, pricing, and operational information that is proprietary to several switch manufacturers. Bell Atlantic Petition at 3; US West Petition at 6; see also BellSouth Petition at 4; Pacific Petition at 4.
- 11. Switch vendors also filed comments in support of waiver petitions filed by the BOCs.²⁴ Vendors argue that if the BOCs comply with the *TRP Order*, they will disclose vendor trade secrets and do irreparable harm to manufacturers. Ericsson Comments at 1; Northern Telecom Comments at 3. Ericsson urges the Bureau to consider alternatives. Ericsson offers support and cooperation for any alternative that prevents disclosure of Ericsson proprietary information. Ericsson Comments at 9. Northern Telecom agrees to consider specific proposals for public disclosure of information related to SCIS if the Commission establishes appropriate protections for the use and disclosure of the company's confidential and proprietary information. Northern Telecom Comments at 5-6.
- 12. US West offers to file SCM with the Bureau under Commission Rules for confidential treatment. US West Petition at 10;²⁵ see 47 C.F.R. §§ 0.457(d) & 0.459(a). US West's approach would place SCM in the Bureau's possession for a specific period of time, but would not allow public inspection of SCM. The carrier, however, refuses to agree to this approach without a Bureau Order, before the examination period, declaring SCM a trade secret and therefore protected under Section 0.459 of the Commission's Rules, 47 C.F.R. § 0.459, and FOIA exemption 4.
- 13. MCI and AT&T filed oppositions to the BOCs' petitions for waiver.²⁶

IV. DISCUSSION

- 14. Our *in camera* review of Ameritech's SCIS model, as well as the pleadings submitted in response to the *TRP Order*, reveals several different types of proprietary information issues at work in SCIS. First, vendor switch data concerning engineering and pricing surfaces directly in the SCIS software inputs and could also be "reverse engineered" from SCIS algorithms. The vendors' uncontested comments demonstrate the competitive nature of the switch market.²⁷ Their decision to reveal competitively sensitive data to Bellcore only pursuant to nondisclosure agreements is further evidence of the proprietary nature of the vendor data used in SCIS. We therefore determine that unrestricted public disclosure of this data would cause competitive harm to switch vendors.
- 15. We also find that BOC inputs used to generate SCIS investment studies are also competitively sensitive, because through their disclosure other BOCs and switch vendors might use them to determine pricing strategies, forecasts of expected financial position regarding switch technologies, and learn negotiated pricing arrangements between the BOCs and switch vendors. Technology-specific outputs for individual BOCs' studies are competitively sensitive because they must be provided by switch technology to enable reviews of the full BOC rate development process. These switch-specific outputs would also allow competitors of switch vendors a means to gain valuable vendor pricing and switch engineering data.
- 16. As to the SCIS model itself, it is not only a valuable intellectual property developed for the use of BOCs and others, which if disclosed would enable the avoidance of substantial licensing fees, but the algorithms that are the core of the model are mathematical expressions of the technical and cost characteristics of specific switch technologies. As such, their disclosure would present all the competitive harms expected from direct disclosure of vendors' SCIS input data, once the algorithms were reversed engineered to disclose the details of the technologies they replicate.
- 17. Another important factor in our decision is that the implementation of ONA. a Commission priority, requires a rational means for apportioning joint and common switching costs between the BOCs' numerous BSE offerings. If switch vendors refuse to provide data for the SCIS model, the BOCs may be unable to develop an adequate alternative method to apportion investment. We presume that any alternatives to SCIS will rely on similar modeling methodology and will again require the use of proprietary data. The courts have construed FOIA exemption 4 to embrace situations such as this in which, apart from private competitive harms, disclosure would impair

²² See Pacific Petition at 1.

²³ See November 13 Reports of Bell Atlantic at 1-2, NYNEX at 1-2, Southwestern, US West at 3.

²⁴ The Ameritech TRP Order granted Northern Telecom's petition for declaratory ruling that parties who provide proprietary information to the BOCs, which the Commission then requires the BOCs to submit, have standing to request confidentiality for that information. Ameritech TRP Order at para. 1 n.4.

US West filed an erratum for page 10 on October 1, 1991.

This summary cites the erratum.

²⁶ AT&T has submitted comments only as an interexchange carrier, not in its role as a switch vendor.

Trade press accounts of this market also describe structural elements that include (1) excess supply; (2) strong domestic and foreign competition; and (3) consequent tightening of competitive bidding strategy. See, e.g., "Turmoil Pervades the Telephone System Industry," Business Communications Review, July 1991; "The Global CO Switch Market: A Tough Game Gets Even Tougher," Telephony, July 23, 1990; "Confronting Low Bids and

the effectiveness or efficiency of agency programs.²⁸ Thus, both the original statutory intent animating exemption 4 of the FOIA, 5 U.S.C. § 552, and the judicially developed understanding of that provision, exempt the SCIS model and associated switch vendor inputs from mandatory FOIA disclosure.

18. Based on our in camera review of Ameritech's SCIS model and the pleadings, we determine that the SCIS model used by the various BOCs is very similar in its basic algorithms. Therefore, the Bureau concludes that all versions of the SCIS model, including associated vendor and BOC inputs, contain proprietary information.²⁹ Our review also shows that individual carriers have many opportunities to customize the model through various decision points and user inputs. These opportunities cannot be practically or usefully separated from the model's operation; the specific decisions made by BOCs when generating SCIS studies involve the application of proprietary data to the model. Our in camera review of the Ameritech SCIS model, in the context of Ameritech's overall ONA rate development process, has confirmed the presence and significance of multiple decision points and data elements in the SCIS-based aspects of Ameritech's cost development process, including (1) BOC and switch vendor inputs to SCIS; (2) the algorithms constituting the model proper; and (3) possible variants in the operation (and results) of SCIS cost studies that are introduced by userdetermined parameters. These SCIS-related aspects of the BOC rate development process are intimately related to the model and equally exempt from mandatory disclosure under FOIA.

V. ORDERING CLAUSES

19. We have determined that the SCIS model licensed by Bellcore to the BOCs, the SCM model, as well as associated data from switch vendors, constitute confidential materials exempt from disclosure under Section 552(b)(4) of the Freedom of Information Act, 5 U.S.C. § 552(b)(4), and the Commission's implementing regulations, 47 C.F.R. §§ 0.457(d), 0.459.

20. Accordingly, IT IS ORDERED pursuant to Section 0.291 of the Commission's Rules, 47 C.F.R. § 0.291, that the request for nondisclosure submitted as part of petitions for waiver of Commission Requirements for Cost Support Material To Be Filed with Open Network Architecture Access Tariffs, Order, DA 91-1168, released Sept. 19, 1991, filed by the Bell Atlantic Telephone Companies, BellSouth Telephone Companies, New York Telephone Company and New England Telephone and Telegraph Company, Pacific Bell and Nevada Bell, Southwestern Bell Telephone Company, and US West Communications, Inc., ARE GRANTED to the extent provided herein.

22. IT IS FURTHER ORDERED that the Bell Operating Companies shall provide their Switching Cost Information System or Service Cost Model for one study area and their Switching Cost Information System and Service Cost Model inputs, and outputs for all study areas, to the Bureau not later than one week after the release of this Order.

FEDERAL COMMUNICATIONS COMMISSION

Carl D. Lawson
Deputy Chief (Policy),
Common Carrier Bureau

Support Gaps," Business Communications Review, December 1989; "U.S. Central Office Switch Market," Telecommunications, February 1987.

history of that case does not affect this reading of Exemption 4. See also 9 to 5 Organization for Women Office Workers v. Board of Governors, 721 F.2d 1, 9 (1st Cir. 1983).

^{21.} IT IS FURTHER ORDERED, that the requirement of simultaneous submission of sensitive materials with a request for confidential treatment, specified in Section 0.459(a) of the Commission's Rules, 47 C.F.R. § 0.459(a), IS WAIVED for purposes of the Switching Cost Information System and Service Cost Model materials to be submitted by the Bell Operating Companies under the terms of this Order.

²⁸ Critical Mass Energy Project v. NRC, 830 F.2d 278 (D.C. Cir. 1987) (*Critical Mass I*). As the reviewing court in *Critical Mass I* found that no record evidence had been adduced to support the district court's determination that the program interests involved were or might be affected by disclosure, the subsequent

Our conclusion includes a preliminary determination that US West's SCM model also constitutes proprietary information. Although the Bureau has not seen any version of the SCM model, US West indicates that it based SCM on the SCIS model. See US West Petition for Waiver at 4 & n. 8. All pleadings indicate that SCM is similar in nature to SCIS.